

USSR

BRIDAVSKIY, M. S., et al., Fizkka i Khimiya Obrabotki Materialov, No 4,
Jul-Aug 71, pp 117-123

trations of Mo in the seam metal of the Ni-Cr-Mo system with 10-15% Cr were 12-14%, which corresponds to its greatest solubility in the matrix. Cause of embrittlement and lowering of long-time strength of the seam metal alloyed with Mo is precipitation of the rich molybdenum μ -phase; intensive formation of this phase is observed in the presence of iron and silicon and for molybdenum in amounts exceeding the limit of its solubility in the matrix. The mechanism of appearance of hot welding cracks in seams alloyed with Mo in quantities of the lowest limit of its solubility and significantly exceeding this quantity and limit were different. Five figures, 2 tables, 9 bibliographic references.

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UDC 621.791.053:620.178.3

USSR

TIMOFEEV, B. T., Engineer, KARZOV, G. P., Candidate of Technical Sciences,
ZEMZIN, V. N., Doctor of Technical Sciences, and DAUNIS, M. A., Candidate
of Technical Sciences

"Low-Cycle Fatigue of the Metal of Welded Seams Made by Mechanized Methods"

Moscow, Svarchnoye Proizvodstvo, No 2, Feb 71, pp 38-40

Abstract: This work presents a study of the cyclical strength of welded joints of 22K steel produced by automatic welding under flux and by the electric slag method for low-cycle loading. The low-cycle fatigue resistance of the metal in a low-carbon seam and its strength properties depend significantly on the welding method, welding materials used, and heat treatment of the joint or structure: the greatest strength is achieved by hardening the metal of the seam, produced by electric slag welding with Sv-10GSMT wire, the least strength by normalizing the seam metal and using Sv-10G2 welding wire. Stress concentrators should not be allowed in welded structures of 22K steel made by mechanized methods, since this reduces the resistance to repeated static loading. The experimental data produced on durability for the welded seam metal with automatic and electric slag welding corresponds to the well known equation of Coffin.

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USSR

UDC 621.791.011.08:620.178.2:669.15'24'25-194

ZHITNIKOV, N. P., Engineer, and ZEMZIN, V. N., Doctor of Technical Sciences

"Tendency of Welded Joints in Chrome-Nickel Steels Toward Brittle Rupture"

Moscow, Svarochnoye Proizvodstvo, No 10, Oct 70, pp 10-12

Abstract: A study was made of the influence of the thickness (rigidity) of welded elements, type of dressing, and mutual placement of welded seams on the residual deformation in the area near the seam in austenitic chrome-nickel steels. A simple test was devised for determining the tendency of welded joints toward crack formation near the seam during heat treatment and in the process of high-temperature operation. The studies indicated that the distribution of residual transverse deformations in the area near the seam is independent of specimen thickness: the magnitude of deformation increases with increasing specimen thickness. Transverse deformations in the area of the seam of a right angle edge are greater than deformations at an edge with an inclination of 45°. Study of specimens with two notches is recommended for the rapid estimation of the resistance to brittle (local) rupture during heat treatment and high-temperature operation of welded joints.

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Steels

USSR

UDC 621.643.411.4.62-192

MOISEYEV, A. A., Candidate of Technical Sciences, SUKHAREVA, V. D., Engineer, ZEMZIN, V. N., Doctor of Technical Sciences, KHITRIK, A. I., Candidate of Technical Sciences, MOSHKEVICH, Ye. I., Candidate of Technical Sciences, KOROBOCHKIN, I. Yu., Candidate of Technical Sciences, KIRVALIDZE, N. M., Candidate of Technical Sciences, PISHCHIKOV, G. P., Candidate of Technical Sciences, DEVIATKO, E. I., Engineer, All-Union "Order of the Red Banner of Labor" Scientific Research Institute of Heat Engineering imeni F. E. Dzerzhinskiy, Central Scientific Research Design and Planning Boiler and Turbine Institute imeni I. I. Polzunov, Road Construction Division, Southern Pipe Plant, All-Union Scientific Research Diesel Locomotive Institute

"Improving the Operational Reliability of Welded Joints and the Technological Properties of High-Strength EP184 Austenitic Steel"

Moscow, Teploenergetika, No 8, Aug 72, pp 46-49

Abstract: The article is a report on the results of joint research by various scientific research institutes and industrial organizations to determine what effect methods of melting EP184 steel might have on the work-

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MOISEYEV, A. A. et al., Teploenergetika, No 8, Aug 72, pp 46-49

ing reliability of welded joints as well as on the other properties of the metal. It was found that crack formation in joints can be eliminated by reducing the oxygen content, as well as the concentrations of hydrogen, nitrogen, sulfur and phosphorus below certain levels. This can be done by melting from a fresh charge with subsequent vacuum-arc remelting. Electroslag remelting can be used as well, but is less effective.

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Acc. Nr: **AP0048822** Abstracting Service:
CHEMICAL ABST.

Ref. Code:
U R O 366

90127k Propionylation of 2-methoxynaphthalene. Zenzina, I. N. [Tsukervanik, I. P. / Novgerodova, N. Yu. (Tashkent Gos. Univ. im. Lenina, Tashkent, USSR). Zh. Org. Khim. 1970, 6(1), 132-5 (Russ). Heating 2-methoxynaphthalene (I) with 1/3 equiv. (EtCO)₂O and approx. 2×10^{-4} equiv. FeCl₃ followed by fractionation gave 80% ketones contg. 85% 1-propionyl deriv. (II) of I and 5% 6-propionyl deriv. (III) of I. The reaction of I with PrCl in the presence of FeCl₃ gave 56% ketones (compn. not given). In both cases, besides II and III, also I and β -naphthol were detected by thin layer chromatog. and uv spectroscopy.

CPJR

REEL/FRAME
19800585

1/2 016 UNCLASSIFIED PROCESSING DATE--23OCT70
TITLE--THE INTERACTION OF THE ACRIDINE DYES WITH DNA IN SOLUTION AND
INSIDE PHAGE PARTICLE -U-
AUTHOR--(04)-GABRILOVICH, I.M., ROMANOVSKAYA, L.N., ZENCHENKO, S.A.,
REZNIKOV, I.V.
COUNTRY OF INFO--USSR
SOURCE--MOLEKULYARNAYA BIOLOGIYA, 1970, VOL 4, NR 3, PP 324-330
DATE PUBLISHED-----70
SUBJECT AREAS--BIOLOGICAL AND MEDICAL SCIENCES
TOPIC TAGS--BIOLOGIC STAIN, PHAGE, DNA
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
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CIRC ACCESSION NO--AP0122578
UNCLASSIFIED

2/2 016

UNCLASSIFIED

PROCESSING DATE--23OCT70

CIRC ACCESSION NO--AP0122578
ABSTRACT/EXTRACT--(U) GP-0-

ABSTRACT. THE ABSORPTION AND THE LUMINESCENCE SPECTRA HAVE BEEN STUDIED OF THE COMPLEXES OF ACRIDINE ORANGE, ACRIDINE YELLOW, TRYPAFLAVINE AND RIVANOLE WITH THREE SAMPLES OF THE NATIVE AND DENATURED DNA OF DIFFERENT BASE COMPOSITION. ACRIDINE ORANGE, ACRIDINE YELLOW AND TRYPAFLAVINE ARE SHOWN TO INTERACT WITH NATIVE AND DENATURED DNA IN A DIFFERENT WAY. ACRIDINE YELLOW AND TRYPAFLAVINE INTERACT PREFERENTIALLY WITH ADENINE AND THYMINE OF DNA. ACRIDINE YELLOW, RIVANOLE AND TRYPAFLAVINE ARE CAPABLE TO PENETRATE THE PARTICLES OF T2 AND L1 PHAGES AND FORM THE COMPLEXES WITH THE PHAGE DNA, WHEREAS ACRIDINE ORANGE PENETRATES ONLY THE L1 PHAGE PARTICLES. TRYPAFLAVINE INTERACTS BOTH WITH PHAGE DNA AND PHAGE PROTEIN.
FACILITY: BYELORUSSIAN STATE UNIVERSITY, USSR, MINSK.

UNCLASSIFIED

Acc. Nr: **AP0052255**

Ref. Code: **UR0246**

PRIMARY SOURCE: Zhurnal Nevropatologii i Psikhiatrii imeni
S. S. Korsakova, 1970, Vol 70, Nr **3**,
pp **414-417**

AN EVALUATION SCALE OF THE OUTCOME LEVEL IN SCHIZOPHRENIA

G. V. Zeneut ch

For theoretical and practical purposes it is quite important to have a unified evaluation scale of the outcome state in schizophrenia. The author proposes a modification of the well-known scheme given by M. Y. a. Sereisky. The proposed modifications concern the consideration of not only the clinical picture, but of the level of rehabilitation in work and social contacts of the patient. Having these principals in view, the author proposes his evaluational scale in schizophrenia.

111
222 2
REEL/FRAME
19820819

Combustion

USSR

UDC 536.46

ZENIN, A. A., LEYPUNSKIY, O. I., and PUCHKOV, V. M., Institute of Chemical Physics, Academy of Sciences USSR, Moscow

"Place of Action of a Catalyst in the Combustion of Condensed Substance"

Moscow, Doklady Akademii Nauk SSSR, Vol 198, No 2, 1971, pp 361-362

Abstract: The combustion at 5-60 atm of pressed charges consisting of polymethylmethacrylate and NH_4ClO_4 in the weight ratio of 22.5:77.5 and containing 1% of Fe_2O_3 was studied. The temperature distribution in the condensed and gas phases during combustion was determined by means of thermocouples. It was established that in the pressure range above 10 atm, in which Fe_2O_3 acted as a catalyst, the catalyst reduced the temperature gradient in the gas phase, with the result that heat transfer from the gas phase to the condensed phase diminished; the catalyst substantially increased the width of the heating + decomposition zone in the condensed phase; the catalyst increased the evolution of heat in the decomposition zone of the condensed phase and the gas layer immediately adjacent to this zone; the catalyst practically did not change the mean volume rate of heat evolution in the gas phase. The relations established indicated that the catalyst exerted 1/2

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ZENIN, A. A., et al., Doklady Akademii Nauk SSSR, Vol 198, No 2, 1971, pp 361-362

its action in the condensed phase layer next to the charge surface and in a small part of the gas phase adjacent to this surface. (Manuscript submitted by Academician V. N. Kondrat'yev, 17 Jul 70)

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USSR

UDC 541.11:543.422.25:541.49:547.551:547.822.3:547.1'118

GOLOVNYA, R. V., ZHURAVLEVA, I. L., ZENIN, S. V., POLYAKOV, V. A.,
SERGEYEV, G. B.

"Determining the Thermodynamic Characteristics of the Complex Formation of
Amines with Alkyl and Aryl Phosphates by the Nuclear Magnetic Resonance Method"

Moscow, Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya, No 11, 1973,
pp 2595-2597

Abstract: The equilibrium constants, enthalpy variation, entropy variation and chemical shifts were obtained for complex formation of aniline with triethyl phosphate and tri-p-tolyl phosphate and piperidine with tri-o,p-xylenyl phosphate. The complex formation of pyridine with triphenyl phosphate was detected. The complex formation of phosphates with amines takes place both by the path of formation of the hydrogen bond $NH...O=P$ and $N^{\delta-}...P^{\delta+}$ bond. A method is proposed for determining the complex formation constants from the nuclear magnetic resonance data for comparable concentrations of the components. The process of complex formation in the given systems follows from the fact that on the addition of phosphates to the amine solution, the signals from the protons of the NH groups shift in the direction of the weak field.

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1/2 023 UNCLASSIFIED PROCESSING DATE--16OCT70
TITLE--ULTRAVIOLET SPECTRA AND IONIZATION CONSTANTS OF SOME QUINOL
PHOSPHATES IN AQUEOUS ALCOHOL SOLUTIONS -U-
AUTHOR--(05)-SERGEYEV, G.B., KARUNINA, L.P., BATYUK, V.A., ZENIN, S.V.,
SIROTA, T.V.
COUNTRY OF INFO--USSR
SOURCE--VESTN. MOSK. UNIV., KHIM. 1970, 11(1), 112-15
DATE PUBLISHED-----70
SUBJECT AREAS--CHEMISTRY
TOPIC TAGS--UV SPECTRUM, IONIZATION, HYDROQUINONE, ORGANIC PHOSPHATE,
OXIDATION, QUINONE
CONTROL MARKING--NO RESTRICTIONS
DOCUMENT CLASS--UNCLASSIFIED
PROXY REEL/FRA--1995/1293 STEP NO--UR/0189/70/011/001/0112/0115
CIRC ACCESSION NO--AP0116754
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PROCESSING DATE--16OCT70

CIRC ACCESSION NO--AP0116754
 ABSTRACT/EXTRACT--(U) GP-0- ABSTRACT. THE KNOWLEDGE OF THE REACTIVITY OF
 QUINOL PHOSPHATES IS IMPORTANT FOR THE STUDY OF THE REACTION OF
 CONCERTED OXIDATIVE PHOSPHORYLATION. THE UV SPECTRA OF THESE COMPODS.
 AND THEIR PK VALUES WERE STUDIED. IN THE SPECTRA OF THE NAPHTHOQUINOL
 DERIVS. STUDIED, 2 DISTINCT ABSORPTION MAX. OCCUR AT SIMILAR TO 240 AND
 SIMILAR TO 300 NM. IN THE SPECTRA OF THE IONIC FORM, THE ABSORPTION
 MAX. ARE SHIFTED TOWARDS LONGER WAVELENGTHS AND THEIR ABSORPTIVITY IS
 HIGHER AS COMPARED WITH THE UNIONIZED FORM OF THE COMPODS. A SHARP
 DIFFERENCE BETWEEN THE SPECTRA OF THE IONIC AND OF THE UNDISSOC. FORMS
 ALLOWS ONE TO DET. THE IONIZATION CONSTS. THE PK MEASURED INDICATE THAT
 THE COMPODS. ARE WEAK ACIDS. INTRODUCTION OF 1 MORE ME GROUP INTO THE
 MOL. OF A METHYL NAPHTHOQUINOL PHOSPHATE LOWERS THE ACIDITY OF THE
 COMPOD. BY SIMILAR TO 0.5 PK, WHEREAS THE REPLACEMENT OF ME GROUPS BY CL
 ATOMS AT THE 2 AND 3 POSITIONS SHARPLY INCREASES THE ACIDITY.
 INCREASED DILN. WITH MEON (FROM 50 TO 5PERCENT) RESULTS IN ENHANCED
 ACIDITY (BY SIMILAR TO 1 PK). THE QUINOL PHOSPHATE OXIDN., ACCOMPANIED
 BY THE FORMATION OF RESPECTIVE QUINONES, CAN BE CONVENIENTLY FOLLOWED BY
 UV SPECTROSCOPY AS THE SPECTRA OF THE KETONES FORMED ARE DIFFERENT FROM
 THOSE OF THE REAGENTS. THE PK (20DEGREES), ABSORPTIVITY, AND ABSORPTION
 MAX. ARE GIVEN FOR 1,4,BENZOQUINOL DIMETHYL PHOSPHATE,
 2,METHYL,1,4,NAPHTHOQUINOL DIMETHYL PHOSPHATE,
 2,METHYL,1,4,NAPHTHOQUINOL DIETHYL PHOSPHATE, 2,3,DIMETHYL,
 1,4,NAPHTHOQUINOL DIMETHYL PHOSPHATE AND 2,3,DICHLORO, 1,4,NAPHTHOQUINOL
 DIMETHYL PHOSPHATE.

UNCLASSIFIED

USSR

UDC 577.4

ZENIN, V. I.

"Monitoring Control Automata by Composite Codes"

V sb. Tekhn. diagnostika (Technical Diagnostics -- collection of works), Moscow, Nauka Press, 1972, pp 253-254 (from RZh-Kibernetika, No 7, Jul 72, Abstract No 7V416)

No abstract

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USSR

UDC 616.8+616.89-034.3

ZENEVICH, G. V.

Voprosy Dispanserizatsii Psikhicheski i Nervnobil'nykh (Clinical Observation of Mental and Neurological Patients), 2d ed., Leningrad, 1972, 200 pp

Translation:

Annotation

The book emphasizes that a psychoneurological clinic is the best non-hospital facility for providing modern outpatient psychoneurological care. It discusses the basic questions relating to the organizational structure of psychoneurological clinics and methods of clinical treatment of mental and neurological patients. The monograph takes up such subjects as the registration of mental patients, system of dynamic observation, methods of clinical treatment in general and of the diseases most often seen in the clinic in particular.

The peculiarities of such work in rural localities are discussed separately. The methods of observing patients with socially dangerous tendencies are described in detail. Special sections are devoted to important aspects of the prevention of neurological and mental diseases, readaptation of mental patients, disability evaluation, and legal protection of their rights.

The corrections and additions made in the second edition of the book are as follows. They relate mainly to some new organizational forms of outpatient psychiatric care, new methods and new forms of registering mental

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ZENEVICH, G. V., Voprosy Dispanserizatsii Psikhicheski i Nervnabol'nykh,
2d ed., 1972, 200 pp

patients used in the USSR. The section dealing with the rehabilitation and readaptation of patients has been considerably enlarged. All these additions have been made necessary by the continued development of psychiatry and improvement of the health system. The manuscript is also updated by references to the recent literature.

The book is intended for physicians in psychoneurological institutions neuropathologists, psychiatrists, and health administrators.

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ZEMEVICH, G. V., Voprosy Dispanserizatsii Psikhicheski i Nervnol'nykh, 2d ed., 1972, 200 pp

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ZENEVICH, G. V., Voprosy Dispanserizatsii Psikhicheski i Nervnobol'nykh,
2d ed., 1972, 200 pp

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USSR

ZENKEVICH, L. A., (Editor)

Ekologiya i Raspredeleniye Morskoy Dønnoy Fauny i Flory (Ecology and Distribution of Flora and Fauna of the Sea Bottom), Moscow, "Nauka," 1970, 312 pp

Translation: This volume is devoted to study of the composition and also the principles of distribution of marine fauna and flora and their ecology. Articles containing new information on the biology of marine plant and animal organisms will elucidate problems of the biological structure of the ocean. The book is intended for oceanologists, hydrobiologists and zoologists.

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- ZENKEVICH, L. A., *Ekologiya i Raspredeleniye Morskoy Donnoy Fauny i Flory* (Ecology and Distribution of Flora and Fauna of the Sea Bottom), Moscow, "Nauka," 1970, 312 pp
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USSR

ZENKEIICH, L. A., *Ekologiya i Raspredeleniye Morskoy Dounoy Fauny i Flory* (Ecology and Distribution of Flora and Fauna of the Sea Bottom), Moscow, "Nauka," 1970, 312 pp

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3/3

1/2 016 UNCLASSIFIED PROCESSING DATE--30OCT70
TITLE--NARROW BAND SPECTRAL PHONOCARDIOGRAPHY AND THE RESULTS OF FREQUENT
ANALYSIS OF SOUNDS AND MURMURS IN ATHEROSCLEROTIC CARDIOSCLEROSIS AND
AUTHOR--(03)-TUMANOVSKIY, M.N., SIROTA, A.D., ZENKEVICH, M.M.

COUNTRY OF INFO--USSR

SOURCE--KARDIOLOGIYA 10(1): 93-98. ILLUS. 1970

DATE PUBLISHED-----70

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TOPIC TAGS--HEART DISEASE, PHONOCARDIOGRAPHY, DIAGNOSTIC MEDICINE

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CIRC ACCESSION NO--AP0131161

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YEREMYAN, A.
to
ZENKEVICH, M.M.